Thrombin generation at macroscopic surfaces : a study in a tubular flow reactor

STELLINGEN
behorende bij het proefschrift

THROMBIN GENERATION AT MACROSCOPIC SURFACES

A study in a tubular flow reactor

van Didier Billy

1. Antithrombin is not a physiological inhibitor of prothrombinase.

2. *In vivo* the rate of thrombin generation is more likely to be limited by physical processes than by the enzymatic activity of the prothrombinase complex.

3. At phospholipid surfaces low in phosphatidylserine, the formation of prothrombinase does not necessarily precede the formation of the prothrombin-prothrombinase complex, so that trimolecular reaction kinetics ensue.

4. Phosphatidylserine may have a high propensity to exist as small clusters when present in a membrane containing phosphatidylethanolamine. Buzzi *et al.*: Interaction of annexin VI with membranes: highly restricted dissipation of clustered phospholipids in membrane containing phosphatidylethanolamine. Bioch. 1992, 31:10406-10413.

5. On macroscopic surfaces the apparent K_m increases with the surface density of a bound enzyme.

6. Spread platelets do not support prothrombinase activity.

7. Surface-immobilized heparin initiates the blood clotting process.

8. Un vin Français qui ne réjouit pas le coeur peut toujours le guérir.

9. De emigratie van Frankrijk naar Nederland zou eenvoudiger zijn als men in Nederland in staat zou zijn "croissants" te bakken.

10. Les Pays-Bas ne sont un narco-état que pour les gens sous "overdose" de verbiage Français.

11. La bonne science peut s'apprendre d'un bon cuisinier.

12. La poésie de la science est méconnue par la science de la poésie.

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